IN THE CLAIMS:

The status of each claim that has been introduced in the above-referenced application is identified in the ensuing listing of the claims. This listing of the claims replaces all previously submitted claims listings.

1. (Currently amended) A method for supporting a substrate during programmed material consolidation of one or more objects on or adjacent to the substrate, comprising:

securing the substrate in position over a support surface by:

positioning the substrate at least partially within a receptacle formed by at least one raised element; and

disposing a retention lip extending laterally from the at least one raised element over at least a portion of a periphery of a major surface of the substrate; and

preventing unconsolidated material from contacting a bottom surface of the substrate as one or more objects are being fabricated on or adjacent to the substrate by a programmed material consolidation process.

2. (Canceled)

3. (Canceled)

4. (Currently amended) The method of claim ~~3~~1, wherein the retention lip contacts at least the portion of the periphery of the substrate.

5. (Original) The method of claim 4, further comprising:

positioning at least one spacer between the support surface and the bottom surface of the substrate.

6. (Currently amended) The method of claim ~~3~~1, wherein disposing the retention lip comprises forming the retention lip by programmed material consolidation processes.

7. (Original) The method of claim 6, wherein forming the retention lip by programmed material consolidation processes includes employing stereolithography.

8. (Currently amended) The method of claim ~~3~~1, wherein disposing the retention lip comprises positioning a preformed retention lip over at least a portion of a periphery of the substrate.

9. (Currently amended) The method of claim ~~2~~1, wherein positioning the substrate comprises positioning the substrate within a receptacle formed by at least one raised element that substantially surrounds the substrate.

10. (Original) The method of claim 9, further comprising:
disposing at least one extension element on an upper surface of the at least one raised element.

11. (Original) The method of claim 10, wherein disposing the at least one extension element comprises fabricating the at least one extension element by programmed material consolidation processes.

12. (Original) The method of claim 11, wherein forming the at least one extension element by programmed material consolidation processes includes employing stereolithography.

13. (Currently amended) The method of claim ~~2~~1, wherein securing the substrate in position over the support surface includes applying a negative pressure to the bottom surface of the substrate.

14. (Original) The method of claim 13, wherein securing the substrate in position over the support surface further includes positioning the substrate over a sealing element with a peripheral portion of the bottom surface of the substrate contacting the sealing element.

15. (Original) The method of claim 14, further comprising:
breaking a seal between the sealing element and the bottom surface of the substrate.

16. (Original) The method of claim 1, wherein securing the substrate in position over the support surface includes applying a negative pressure to the bottom surface of the substrate.

17. (Original) The method of claim 1, further comprising:
removing the substrate from the support surface.

18. (Original) The method of claim 17, wherein removing the substrate comprises applying a positive pressure to the bottom surface of the substrate.

19. (Original) The method of claim 18, wherein applying a positive pressure to the bottom surface of the substrate includes creating a circulating air flow beneath the bottom surface of the substrate.

20. (Original) The method of claim 19, wherein creating a circulating air flow beneath the bottom surface of the substrate causes the substrate to hover over the support surface.

21. (Original) The method of claim 17, wherein removing the substrate comprises applying force to the bottom surface of the substrate.

22. (Currently amended) A programmed material consolidation method, comprising:
positioning at least one substrate in a receptacle of a retention system including a raised periphery that laterally surrounds the at least one substrate;
introducing unconsolidated material onto a surface of the at least one substrate so as to substantially fill the receptacle with unconsolidated material; and
programmably consolidating at least portions of the unconsolidated material.

23. (Original) The programmed material consolidation method of claim 22, wherein introducing unconsolidated material comprises forming a layer of unconsolidated material of desired thickness over the at least one substrate, then selectively consolidating regions of the layer.

24. (Original) The programmed material consolidation method of claim 23, wherein introducing unconsolidated material further comprises repeating the acts of forming and selectively consolidating at least once.

25. (Canceled)

26. (Currently amended) The programmed material consolidation method of claim ~~25~~22, further comprising:
planarizing a surface of the unconsolidated material within the receptacle.

27. (Original) The programmed material consolidation method of claim 26, wherein planarizing is effected with at least one of a meniscus blade and an air knife.

28. (Original) The programmed material consolidation method of claim 22, wherein introducing unconsolidated material comprises spraying unconsolidated material onto at least a portion of the at least one substrate.

29. (Original) The programmed material consolidation method of claim 22, wherein introducing unconsolidated material comprises dispensing the unconsolidated material in a laminar flow.

30. (Original) The programmed material consolidation method of claim 29, wherein dispensing is effected without introducing unconsolidated material onto structures that protrude from the at least one substrate.

31. (Previously presented) The programmed material consolidation method of claim 22, further comprising:

removing excess unconsolidated material from the receptacle following the programmably consolidating.

32. (Original) The programmed material consolidation method of claim 22, further comprising:

preventing unconsolidated material from contacting a bottom surface of the at least one substrate while introducing unconsolidated material into the receptacle.

33. (Original) The programmed material consolidation method of claim 22, further comprising:

removing the at least one substrate from the receptacle following programmably consolidating at least portions of the unconsolidated material.

34. (New) A method for supporting a substrate during programmed material consolidation of one or more objects on or adjacent to the substrate, comprising:

securing the substrate in position over a support surface by positioning the substrate within a receptacle formed by at least one raised element that substantially surrounds the substrate;

preventing unconsolidated material from contacting a bottom surface of the substrate as one or more objects are being fabricated on or adjacent to the substrate by a programmed material consolidation process; and

disposing at least one extension element on an upper surface of the at least one raised element.

35. (New) The method of claim 34, wherein disposing the at least one extension element comprises fabricating the at least one extension element by programmed material consolidation processes.

36. (New) The method of claim 35, wherein forming the at least one extension element by programmed material consolidation processes includes employing stereolithography.

37. (New) The method of claim 34, wherein securing the substrate in position over the support surface includes applying a negative pressure to the bottom surface of the substrate.

38. (New) The method of claim 37, wherein securing the substrate in position over the support surface further includes positioning the substrate over a sealing element with a peripheral portion of the bottom surface of the substrate contacting the sealing element.

39. (New) The method of claim 38, further comprising:
breaking a seal between the sealing element and the bottom surface of the substrate.

40. (New) The method of claim 34, wherein securing the substrate in position over the support surface includes applying a negative pressure to the bottom surface of the substrate.

41. (New) The method of claim 34, further comprising:
removing the substrate from the support surface.

42. (New) The method of claim 41, wherein removing the substrate comprises applying a positive pressure to the bottom surface of the substrate.

43. (New) The method of claim 42, wherein applying a positive pressure to the bottom surface of the substrate includes creating a circulating air flow beneath the bottom surface of the substrate.

44. (New) The method of claim 43, wherein creating a circulating air flow beneath the bottom surface of the substrate causes the substrate to hover over the support surface.

45. (New) The method of claim 41, wherein removing the substrate comprises applying force to the bottom surface of the substrate.

46. (New) A method for supporting a substrate during programmed material consolidation of one or more objects on or adjacent to the substrate, comprising:
securing the substrate in position over a support surface;
preventing unconsolidated material from contacting a bottom surface of the substrate as one or more objects are being fabricated on or adjacent to the substrate by a programmed material consolidation process; and
removing the substrate from the support surface by creating a circulating air flow beneath the bottom surface of the substrate.

47. (New) The method of claim 46, wherein securing the substrate in position over the support surface includes applying a negative pressure to the bottom surface of the substrate.

48. (New) The method of claim 47, wherein securing the substrate in position over the support surface further includes positioning the substrate over a sealing element with a peripheral portion of the bottom surface of the substrate contacting the sealing element.

49. (New) The method of claim 48, further comprising:
breaking a seal between the sealing element and the bottom surface of the substrate.

50. (New) The method of claim 46, wherein securing the substrate in position over the support surface includes applying a negative pressure to the bottom surface of the substrate.

51. (New) The method of claim 46, wherein creating a circulating air flow beneath the bottom surface of the substrate causes the substrate to hover over the support surface.

52. (New) The method of claim 46, wherein removing the substrate comprises applying force to the bottom surface of the substrate.

53. (New) A programmed material consolidation method, comprising:

positioning at least one substrate in a receptacle of a retention system including a raised periphery that laterally surrounds the at least one substrate;

dispensing unconsolidated material onto a surface of the at least one substrate in a laminar flow effected without introducing unconsolidated material onto structures that protrude from the at least one substrate; and

programmably consolidating at least portions of the unconsolidated material.

54. (New) The programmed material consolidation method of claim 53, wherein introducing unconsolidated material comprises forming a layer of unconsolidated material of desired thickness over the at least one substrate, then selectively consolidating regions of the layer.

55. (New) The programmed material consolidation method of claim 54, wherein introducing unconsolidated material further comprises repeating the acts of forming and selectively consolidating at least once.

56. (New) The programmed material consolidation method of claim 53, wherein introducing unconsolidated material comprises spraying unconsolidated material onto at least a portion of the at least one substrate.

57. (New) The programmed material consolidation method of claim 53, further comprising:

removing excess unconsolidated material from the receptacle following the programmably consolidating.

58. (New) The programmed material consolidation method of claim 53, further comprising:

preventing unconsolidated material from contacting a bottom surface of the at least one substrate while introducing unconsolidated material into the receptacle.

59. (New) The programmed material consolidation method of claim 53, further comprising:

removing the at least one substrate from the receptacle following programmably consolidating at least portions of the unconsolidated material.

60. (New) A programmed material consolidation method, comprising:

positioning at least one substrate in a receptacle of a retention system including a raised periphery that laterally surrounds the at least one substrate;

introducing unconsolidated material onto a surface of the at least one substrate so as to substantially fill the receptacle with unconsolidated material;

programmably consolidating at least portions of the unconsolidated material; and

removing excess unconsolidated material from the receptacle following the programmably consolidating.

61. (New) The programmed material consolidation method of claim 60, wherein introducing unconsolidated material comprises forming a layer of unconsolidated material of desired thickness over the at least one substrate, then selectively consolidating regions of the layer.

62. (New) The programmed material consolidation method of claim 61, wherein introducing unconsolidated material further comprises repeating the acts of forming and selectively consolidating at least once.

63. (New) The programmed material consolidation method of claim 60, wherein introducing unconsolidated material comprises spraying unconsolidated material onto at least a portion of the at least one substrate.

64. (New) The programmed material consolidation method of claim 60, wherein introducing unconsolidated material comprises dispensing the unconsolidated material in a laminar flow.

65. (New) The programmed material consolidation method of claim 60, further comprising:

preventing unconsolidated material from contacting a bottom surface of the at least one substrate while introducing unconsolidated material into the receptacle.

66. (New) The programmed material consolidation method of claim 60, further comprising:

removing the at least one substrate from the receptacle following programmably consolidating at least portions of the unconsolidated material.